| GEARTECH | CHECKLIST | | | | No. CK4400 | | SHEET 1 OF 2 |
|--|-----------|---|---|------|------------|----------|--------------|
| | | | | | Rev. A | | DATE 0/07/00 |
| Seal Design Audit | | | | | BY RLE | | DATE 9/27/99 |
| | | | | | CKD JRM | | DATE 9/27/99 |
| | | | | SEAI | _ DATA | | |
| Question | Y | Ν | R | | (| Comments | |
| Do drawings specify the following data? | | | | | | | |
| Seal manufacturer? | | | | | | | |
| Seal type? | | | | | | | |
| Seal size? | | | | | | | |
| Seal material? | | | | | | | |
| Seal clearance (interference) with shaft? |) | | | | | | |
| Shaft diameter, surface | | | | | | | |
| roughness, and tolerances for | or | | | | | | |
| sealing surface? | | | | | | | |
| Housing diameter, surface | | | | | | | |
| roughness, and tolerances for | or | | | | | | |
| fit with seal? | | | | | | | |
| | | | | ASS | EMBLY | | |
| Question | Y | Ν | R | | (| Comments | |
| Has gearbox assembly been | | | | | | | |
| reviewed to assess risk of | _ | | | | | | |
| damage to seal components | | | | | | | |
| Are there procedures for sea | ıl | | | | | | |
| assembly? | | | | | | | |
| Are clearances (interferences) with shaft per | | | | | | | |
| seal manufacturers | | | | | | | |
| recommendations? | | | | | | | |
| Are boundary dimensions pe | r | | | | | | |
| seal manufacturers | | | | | | | |
| recommendations? | | | | | | | |
| Are fixtures for assembly | | | | | | | |
| available? | | | | | | | |
| | | | | SEAL | DESIGN | | |
| Question | Y | Ν | R | | (| Comments | |
| Are external V-rings used to | | | | | | | |
| protect oil seals from | | | | | | | |
| contamination? | | | | | | | |
| Are labyrinth seals specified | | | | | | | |
| (preferred)? | | | | | | | |
| Do labyrinth seals have | | | | | | | |
| proper clearances? Do labyrinth seals have at | | | | | | | |
| least two grooves? | | | | | | | |
| Are labyrinth seals above oil | | | | | | | |
| level? | | | | | | | |
| Are lip seals single lip? | | | | | | | |
| Are lip seals Viton? | | | | | | | |
| Are lip seal materials | | | | | | | |
| compatible with lubricant? | | | | | | | |
| Are lip seals capable of | | | | | | | |
| accommodating shaft | | | | | | | |
| endplay? | | | | | | | |
| Are lip seals capable of | | | | | | | |
| accommodating shaft heat? | | | | | | | |

| GEARTECH | CHEC | KLIS | T | No. CK4400 | SH | HEET 2 OF 2 | | | | | | | |
|--|------|------|--------|------------|-------------|-------------|--|--|--|--|--|--|--|
| OLANILOII | | | | Rev. A | | | | | | | | | |
| Seal Design Audit | | | BY RLE | D/ | ATE 9/27/99 | | | | | | | | |
| _ | | | | CKD JRM | DA | ATE 9/27/99 | | | | | | | |
| Question | Y | N | R | | Comments | | | | | | | | |
| Do lip seals have adequate | | | | | | | | | | | | | |
| lubrication? | | | | | | | | | | | | | |
| Are lip seals replaceable insitu? | | | | | | | | | | | | | |
| Is there adequate access fo replacing lip seals? | or | | | | | | | | | | | | |
| AGMA/AWEA 921-A97 CONFORMANCE | | | | | | | | | | | | | |
| Question | Y | N | R | | Comments | | | | | | | | |
| Do seals conform to | | | | | | | | | | | | | |
| AGMA/AWEA 921: | | | | | | | | | | | | | |
| Adequate life? | | | | | | | | | | | | | |
| Seal type? Seal arrangement? | | | | | | | | | | | | | |
| Seal shaft/housing fits? | | | | | | | | | | | | | |
| Seal retainers? | | | | | | | | | | | | | |
| Seal clearance | | | | | | | | | | | | | |
| (interferences)? | | | | | | | | | | | | | |
| Seal assembly? | | | | | | | | | | | | | |
| Methods of lubrication? | | | | | | | | | | | | | |
| Seal replacement? | | | | | | | | | | | | | |
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